

CRF Processing Date: 1/10/2001

Edited by:

Verified by:

(STIC Staff)

Serial Number: 09/380,826A

ENTERED

 Changed a file from non-ASCII to ASCII Changed the margins in cases where the sequence text was "wrapped" down to the next line Edited a format error in the Current Application Data section, specifically: Edited the Current Application Data section with the actual current number. The number inputted by the applicant was  the prior application data; or  other \_\_\_\_\_ Added the mandatory heading and subheadings for "Current Application Data". Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer. Changed the spelling of a mandatory field (the headings or subheadings), specifically: Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place. Inserted colons after headings/subheadings. Headings edited included: Deleted extra, invalid, headings used by an applicant, specifically: Deleted:  non-ASCII "garbage" at the beginning/end of files;  secretary initials/filename at end of file;  
 page numbers throughout text;  other invalid text, such as \_\_\_\_\_ Inserted mandatory headings, specifically: Corrected an obvious error in the response, specifically: Edited identifiers where upper case is used but lower case is required, or vice versa. Corrected an error in the Number of Sequences field, specifically: A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted. Deleted ending stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: Other:

**Examiner:** The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

3/195

RECEIVED  
JAN 23 2001  
TECH CENTER 1800/2900

P#B

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/380,826A

DATE: 01/18/2001  
TIME: 16:14:19

Input Set : A:\Pto.amc  
Output Set: N:\CRF3\01182001\I380826A.raw

2 <110> APPLICANT: Chappel, Rod  
4 <120> TITLE OF INVENTION: LEPTOSPIRA PATHOGENS  
7 <130> FILE REFERENCE: DAVIE79.001APC  
9 <140> CURRENT APPLICATION NUMBER: 09/380,826A  
10 <141> CURRENT FILING DATE: 1999-11-22  
12 <150> PRIOR APPLICATION NUMBER: PCT/AU98/00145  
13 <151> PRIOR FILING DATE: 1998-03-06  
15 <150> PRIOR APPLICATION NUMBER: AU PO5494/97  
16 <151> PRIOR FILING DATE: 1997-03-07  
18 <160> NUMBER OF SEQ ID NOS: 26  
20 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
22 <210> SEQ ID NO: 1  
23 <211> LENGTH: 1477  
24 <212> TYPE: DNA  
25 <213> ORGANISM: Leptospira fainei  
27 <400> SEQUENCE: 1  
28 gatcatggct cagaactaac gctggcggcg cgtcttaaac atgcaagtcg agcggggtag 60  
29 caatacctag cggcgaacgg gtgagtaaca cgtggtaatc ttccctccgag tctggataa 120  
30 ctttccgaaa ggaaagctaacc taccggatag tcctgttggat tcacaagatt tgataggtaa 180  
31 agatttatttgc cttggagatg agcccccgcc cgattagcta gttggtgagg taatggctca 240  
32 ccaaggcgcac gatcggtagc cggcctgaga ggggttccgg ccacaatggaa actgagacac 300  
33 ggtccataact cctacgggag gcacgcgtta agaatcttgc tcaatgggg aaaccctgaa 360  
34 gcagcgcacgc cgcgtgaacg aagaaggct tcggattgtaa aagttcatttgc ggcaggaaaa 420  
35 ataaggcgcata atgtgatgtat ggtacctgcc taaagcaccgc gctaactacg tgccacgc 480  
36 cgcgttaata cgtatggtgc aagcgttgcgat cggaaatcatttgc gggcgtaaagg ggtgcgttagg 540  
37 cggatttgcgat agtcagggtgt gaaaactgcg ggcgtcaaccc gttggcctgca cttgaaaacta 600  
38 caagtctggat gtttgggaga ggcgttgcgat attccaggatg tagcggtgaa atgcgttagat 660  
39 atctggagga acaccagtgg cgaaggcgcac ttgcgtggctc aaaactgcgact ctgaggcgc 720  
40 aaagcgtggg tagtaaacgg gattagatac cccggtaatc cacgcctaa acgttgtcta 780  
41 ccagttgttgc ggggttttaa ccctcagtaa cgaacctaaac ggattaagtgat gaccgcctgg 840  
42 ggactatgtc cgcaagagatg aaactcaaag gaattgacgg ggggtccgcac aagcgggtgg 900  
43 gcatgtggtt taattcgtatg ataccccaaa aacctcaccttgc gggcttgaca tggatctgaa 960  
44 tcatgttagag atatatgtatc cttcggcgcgat attcacaggt gctgcgtatggat tgcgtcgc 1020  
45 tcgtgtcgat agatgttggg ttaagtcccg caacgcgc aacccttacgtatgttgc 1080  
46 accttaagtt gggcacttgcgat acgaaactgc cggtgacaaa cccggagggatgatgaa 1140  
47 cgtccaaatcc tcatggcctt tatgtccagg gccacacacgc tgctacaatgc gcccatacag 1200  
48 agggtcgcca actcgcaaga gggagctaat ctctaaaatgcgatggatggatggatggg 1260  
49 gtctgcactt cggccatgcgat aagtccggat cgttagatgcgatggatcatgcgatggatggg 1320  
50 tgaatacgtt cccggacatttgcgtatc acacacccgcgatggatcatgcgatggatggatggg 1380  
51 gaagtggatgc ttgttaaccgc taaggagaca gactactaaatgcgatggatcatgcgatggatggg 1440  
52 gaagtgcgttgc caaggttaccgc taaatcgatttgcgatggatggatggatggatggatggg 1477  
54 <210> SEQ ID NO: 2  
55 <211> LENGTH: 22  
56 <212> TYPE: DNA  
57 <213> ORGANISM: Artificial Sequence  
59 <220> FEATURE:  
60 <223> OTHER INFORMATION: Primer for L. fainei.

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/380,826A

DATE: 01/18/2001  
TIME: 16:14:19

Input Set : A:\Pto.amc  
Output Set: N:\CRF3\01182001\I380826A.raw

```

62 <400> SEQUENCE: 2
63 tggatca caagattga ta
65 <210> SEQ ID NO: 3
66 <211> LENGTH: 19
67 <212> TYPE: DNA
68 <213> ORGANISM: Artificial Sequence
70 <220> FEATURE:
71 <223> OTHER INFORMATION: Primer for L. fainei.
73 <400> SEQUENCE: 3
74 ttcaccgcta cacctggaa
76 <210> SEQ ID NO: 4
77 <211> LENGTH: 7
78 <212> TYPE: DNA
79 <213> ORGANISM: Artificial Sequence
81 <220> FEATURE:
82 <223> OTHER INFORMATION: Primer for L. fainei.
84 <400> SEQUENCE: 4
85 tggatca
87 <210> SEQ ID NO: 5
88 <211> LENGTH: 7
89 <212> TYPE: DNA
90 <213> ORGANISM: Artificial Sequence
92 <220> FEATURE:
93 <223> OTHER INFORMATION: Primer for L. fainei.
95 <400> SEQUENCE: 5
96 tttgata
98 <210> SEQ ID NO: 6
99 <211> LENGTH: 22
100 <212> TYPE: DNA
101 <213> ORGANISM: Artificial Sequence
103 <220> FEATURE:
104 <221> NAME/KEY: misc_feature
105 <222> LOCATION: (1)...(22)
106 <223> OTHER INFORMATION: n = A,T,C or G
108 <223> OTHER INFORMATION: Primer for L. fainei.
110 <400> SEQUENCE: 6
111 tggatca caagattga ta
113 <210> SEQ ID NO: 7
114 <211> LENGTH: 22
115 <212> TYPE: DNA
116 <213> ORGANISM: Artificial Sequence
118 <220> FEATURE:
119 <223> OTHER INFORMATION: Primer for L. fainei.
121 <400> SEQUENCE: 7
122 tggatca caagattga ta
124 <210> SEQ ID NO: 8
125 <211> LENGTH: 200
126 <212> TYPE: DNA
127 <213> ORGANISM: Leptospira inadai

```

**RECEIVED**

JAN 23 2001

TECH CENTER 1600 9:00 AM

19

7

7

22

22

WQK

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/380,826A

DATE: 01/18/2001  
TIME: 16:44:19

Input Set : A:\Pto.amc  
Output Set: N:\CRF3\01182001\I380826A.raw

129 <400> SEQUENCE: 8  
 130 ccgagtctgg gataacttgc gaaaaggaaa gctaataccg gatagtccta ctggatcaca 60  
 131 ggatctgata ggtaaagatt tattgcttgg agatgagccc gcggccgatt agctagttgg 120  
 132 tgaggttaaag gctcaccaag gcgacgatcg gtagccggcc tgagagggtg tccggccaca 180  
 133 atgaaactga gacacggtcc 200  
 135 <210> SEQ ID NO: 9  
 136 <211> LENGTH: 200  
 137 <212> TYPE: DNA  
 138 <213> ORGANISM: Leptospira meyeri  
 140 <400> SEQUENCE: 9  
 141 ccgagtctgg gataactttt cggaaaaggaaa gctaatactg gatagtcgg agagatcata 60  
 142 agattttcg ggtaaagatt cattgcttgg agatgagccc gcgtccgatt agctagttgg 120  
 143 tgaggttaatg gctcaccaag gcgacgatcg gtagccggcc tgagagggtg ttcggccaca 180  
 144 atgaaactga gacacggtcc 200  
 146 <210> SEQ ID NO: 10  
 147 <211> LENGTH: 200  
 148 <212> TYPE: DNA  
 149 <213> ORGANISM: Leptospira weilii  
 151 <400> SEQUENCE: 10  
 152 ccgagtctgg gataacttgc gaaaaggaaa gctaataactg gatggtcccc agaggatcata 60  
 153 tgatTTTCG ggtaaagatt tattgcttgg agctgagccc gcgtccgatt agctagttgg 120  
 154 tgaggttaatg gctcaccaag gcgacgatcg gtagccggcc tgagagggtg ttcggccaca 180  
 155 atgaaactga gacacggtcc 200  
 157 <210> SEQ ID NO: 11  
 158 <211> LENGTH: 200  
 159 <212> TYPE: DNA  
 160 <213> ORGANISM: Leptospira santarosi  
 162 <400> SEQUENCE: 11  
 163 ccgagtctgg gataacttgc gaaaaggaaa gctaataactg gatagtcgg atagatcata 60  
 164 ggatgtatcg ggtaaagatt cattgcttgg agatgagccc gcgtccgatt agctagttgg 120  
 165 tgaggttaaag gctcaccaag gcgacgatcg gtaaccggcc tgagagggtg ttcggccaca 180  
 166 atgaaactga gacacggtcc 200  
 168 <210> SEQ ID NO: 12  
 169 <211> LENGTH: 200  
 170 <212> TYPE: DNA  
 171 <213> ORGANISM: Leptospira borgpetersenii  
 173 <400> SEQUENCE: 12  
 174 ccgagtctgg gataacttgc gaaaaggaaa gctaataactg gatagtcgg agaggatcata 60  
 175 ggatTTTCG ggtaaagatt tattgcttgg agatgagccc gcgtccgatt agctagttgg 120  
 176 tgaggttaatg gctcaccaag gcgacgatcg gtagccggcc tgagagggtg ttcggccaca 180  
 177 atgaaactga gacacggtcc 200  
 179 <210> SEQ ID NO: 13  
 180 <211> LENGTH: 200  
 181 <212> TYPE: DNA  
 182 <213> ORGANISM: Leptospira noguchii  
 184 <400> SEQUENCE: 13  
 185 ccgagtctgg gataacttgc gaaaaggaaa gctaataactg gatagtcgg agagatcata 60  
 186 agatTTTCG ggtaaagatt cattgcttgg agatgagccc gcgtccgatt agctagttgg 120  
 187 tgaggttaatg gctcaccaag gcgacgatcg gtagccggcc tgagagggtg ttcggccaca 180

RECEIVED  
JAN 23 2001  
TECH CENTER 16002001

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/380,826A

DATE: 01/18/2001  
TIME: 16:14:19

Input Set : A:\Pto.amc  
Output Set: N:\CRF3\01182001\I380826A.raw

```

188 atggaactga gacacgggcc          200
190 <210> SEQ ID NO: 14
191 <211> LENGTH: 200
192 <212> TYPE: DNA
193 <213> ORGANISM: Leptospira kirschneri
195 <400> SEQUENCE: 14
196 ccgagtctgg gataacttgc cgaaaggaa gctaatactg gatggccccc agagatcata 60
197 agatttttcg ggttaaagatt tattgctcgg agatgagccc gcgtccgatt asctagttgg 120
198 tgaggttaaag gctcaccagg gcgacgatcg gtagccggcc tgagagggtg ttcggccaca 180
199 atggaactga gacacggcc          200
201 <210> SEQ ID NO: 15
202 <211> LENGTH: 200
203 <212> TYPE: DNA
204 <213> ORGANISM: Leptospira interrogans
206 <400> SEQUENCE: 15
207 ctgagtctgg gataacttgc cgaaaggaa gctaatactg gatggccccc agagatcata 60
208 agatttttcg ggttaaagatt tattgctcgg agatgagccc gcgtccgatt agctagttgg 120
209 tgaggttaaag gctcaccagg gcgacgatcg gtagccggcc tgagagggtg ttcggccaca 180
210 atggaactga gacacggcc          200
212 <210> SEQ ID NO: 16
213 <211> LENGTH: 29
214 <212> TYPE: DNA
215 <213> ORGANISM: Artificial Sequence
217 <220> FEATURE:
218 <223> OTHER INFORMATION: Primer 27F for Leptospira species.
220 <400> SEQUENCE: 16
221 catggatcca gagtttgatc mtggctcag          29
223 <210> SEQ ID NO: 17
224 <211> LENGTH: 16
225 <212> TYPE: DNA
226 <213> ORGANISM: Artificial Sequence
228 <220> FEATURE:
229 <223> OTHER INFORMATION: Primer 530F for Leptospira species.
231 <400> SEQUENCE: 17
232 gtgccagcmg ccgcgg          16
234 <210> SEQ ID NO: 18
235 <211> LENGTH: 20
236 <212> TYPE: DNA
237 <213> ORGANISM: Artificial Sequence
239 <220> FEATURE:
240 <223> OTHER INFORMATION: Primer 926F for Leptospira species.
242 <400> SEQUENCE: 18
243 aaaactyaaak gaattgacgg          20
245 <210> SEQ ID NO: 19
246 <211> LENGTH: 18
247 <212> TYPE: DNA
248 <213> ORGANISM: Artificial Sequence
250 <220> FEATURE:
251 <223> OTHER INFORMATION: Primer LU for Leptospira species.

```

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/380,826A

DATE: 01/18/2001  
TIME: 16:14:19

Input Set : A:\Pto.amc  
Output Set: N:\CRF3\01182001\I380826A.raw

253 <400> SEQUENCE: 19	
254 cggcgcggtct taaacatg	18
256 <210> SEQ ID NO: 20	
257 <211> LENGTH: 20	
258 <212> TYPE: DNA	
259 <213> ORGANISM: Artificial Sequence	
261 <220> FEATURE:	
262 <223> OTHER INFORMATION: Primer C for Leptospira species.	
264 <400> SEQUENCE: 20	
265 caagtcaagc ggagtagcaa	20
267 <210> SEQ ID NO: 21	
268 <211> LENGTH: 15	
269 <212> TYPE: DNA	
270 <213> ORGANISM: Artificial Sequence	
272 <220> FEATURE:	
273 <223> OTHER INFORMATION: Primer 1392R for Leptospira species.	
275 <400> SEQUENCE: 21	
276 acgggcggtg tgttc	15
278 <210> SEQ ID NO: 22	
279 <211> LENGTH: 15	
280 <212> TYPE: DNA	
281 <213> ORGANISM: Artificial Sequence	
283 <220> FEATURE:	
284 <223> OTHER INFORMATION: Primer 1100R for Leptospira species.	
286 <400> SEQUENCE: 22	
287 gggttgcgtc cgttt	15
289 <210> SEQ ID NO: 23	
290 <211> LENGTH: 18	
291 <212> TYPE: DNA	
292 <213> ORGANISM: Artificial Sequence	
294 <220> FEATURE:	
295 <223> OTHER INFORMATION: Primer 519R for Leptospira species.	
297 <400> SEQUENCE: 23	
298 gwattaccgc ggckgctg	18
300 <210> SEQ ID NO: 24	
301 <211> LENGTH: 19	
302 <212> TYPE: DNA	
303 <213> ORGANISM: Artificial Sequence	
305 <220> FEATURE:	
306 <223> OTHER INFORMATION: Primer rLP for Leptospira species.	
308 <400> SEQUENCE: 24	
309 accatcatca catygctgc	19
311 <210> SEQ ID NO: 25	
312 <211> LENGTH: 21	
313 <212> TYPE: DNA	
314 <213> ORGANISM: Artificial Sequence	
316 <220> FEATURE:	
317 <223> OTHER INFORMATION: Primer B for Leptospira species.	
319 <400> SEQUENCE: 25	

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/380,826A

DATE: 01/18/2001

TIME: 16:14:20

Input Set : A:\Pto.amc

Output Set: N:\CRF3\01182001\I380826A.raw

L:111 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6

RECEIVED

JAN 23 2001

TECH CENTER 1600/2900

1645

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/380,826A

DATE: 01/10/2001  
TIME: 11:05:14

Input Set : A:\DAVIE79SEQLIST.TXT  
Output Set: N:\CRF3\01102001\I380826A.raw

Does Not Comply  
Corrected Diskette Needed

4 <110> APPLICANT: Chappel, Rod  
6 <120> TITLE OF INVENTION: LEPTOSPIRA PATHOGENS  
9 <130> FILE REFERENCE: DAVIE79.001APC  
11 <140> CURRENT APPLICATION NUMBER: 09/380,826A  
12 <141> CURRENT FILING DATE: 1999-11-22  
14 <150> PRIOR APPLICATION NUMBER: PCT/AU98/00145  
15 <151> PRIOR FILING DATE: 1998-03-06  
17 <150> PRIOR APPLICATION NUMBER: AU P05494/97  
18 <151> PRIOR FILING DATE: 1997-03-07  
20 <160> NUMBER OF SEQ ID NOS: 26  
22 <170> SOFTWARE: FastSEQ for Windows Version 4.0

## ERRORED SEQUENCES

324 <210> SEQ ID NO: 26  
325 <211> LENGTH: 23  
326 <212> TYPE: DNA  
327 <213> ORGANISM: Artificial Sequence  
329 <220> FEATURE:  
330 <223> OTHER INFORMATION: Primer INT rLP for Leptospira species.  
332 <400> SEQUENCE: 26  
333 ttttttcc ctgcattactg aac

23

E--> 334 6  
E--> 334 1

VERIFICATION SUMMARY  
PATENT APPLICATION: US/09/380,826A

DATE: 01/10/2001  
TIME: 11:05:15

Input Set : A:\DAVIE79SEQLIST.TXT  
Output Set: N:\CRF3\01102001\I380826A.raw

L:113 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6  
L:334 M:254 E: No. of Bases conflict, LENGTH:Input:6 Counted:23 SEQ:26  
M:254 Repeated in SeqNo=26